# Bently Nevada 330190 Series Service Manual

330190-075-00-05

## 1. Description

Manufacturer : Bently Nevada

## 3. Product Information

Manufacturer : Bently Nevada

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Product No. :330190-075-00-05

Product Type : 3300 XL Extended Temperature Range (ETR) Extension Cable

Cable Length Option : 075 - 7.5 meters (24.6 feet)

Cable Option : 00 -Standard cable

Agency Approval Option : 05 -CSA, ATEX, IECEx  Approvals

Nominal Extension Cable DC Resistance

Resistance (RCORE) from Center Conductor

to Center Conductor

Length of Extension Cable (m)□7.5 meters (24.6 feet)

RCORE (Ω)□1.65 ± 0.25

Resistance (RJACKET ) from Outer Conductor

to Outer Conductor

Length of Extension Cable (m) 7.5 meters (24.6 feet)

RJACKET (Ω) :0.49 ± 0.10

Extension Cable Capacitance 69.9 pF/m (21.3 pF/ft) typical

Field Wiring

0.2 to 1.5 mm2 (16 to 24

AWG). Recommend using

3 conductor shielded triad

cable and tinned field

wiring. Maximum length of

305 meters (1,000 feet)

between the 3300 XL

Proximitor Sensor and the

monitor. See the frequency

response graphs, Figures

10 and 12, for signal rolloff

at high frequencies when

using longer field wiring

lengths.

Linear Range

2 mm (80 mils). Linear

range begins at

approximately 0.25 mm (10

mils) from target and is

from 0.25 to 2.3 mm (10 to

90 mils) (approximately –1

to –17 Vdc).

Recommended

Gap Setting for

Radial Vibration

-9 Vdc [approximately 1.27

mm (50 mils)]

Extension Cable Material

Standard

cable

75 Q triaxial, fluoroethylene

propylene (FEP) insulated

Extended

Temperature

Range cable

75Ω triaxial, perfluoroalkoxy

(PFA) insulated.

Minimum

Cable Bend

Radius

25.4 mm (1.0 in)

3300 XL 8 mm components are both electrically and physically interchangeable with non-XL 3300 5 mm and 8 mm components when minimum permissible cable bend radius is observed.

Connector Material

Gold-plated brass or goldplated beryllium copper.

Maximum Connector Torque

0.565 N•m (5 in•lbf)

Extension Cable 34 g/m (0.4 oz/ft)

Armored Extension Cable

103 g/m (1.5 oz/ft)

Extension Cable Temperature Range

Operating and Storage Temperature

| Standard Cable | Extended Temperature Range Cable |
|---|---|
| -52°C to +177°C (-62°F to +350°F) | -52°C to +260°C (-62°F to +500°F) |

Compliance and Certifications

FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

EMC

European Community Directive:

EMC Directive 2014/30/EU

Standards

EN 61000-6-2; Immunity for Industrial Environments

EN 61000-6-4; Emissions for Industrial Environments

RoHS

European Community Directive:

RoHS Directive 2011/65/EU

Maritime

2019 Rules for Conditions of Classification, Part 1, 1-1-1/7.7, 1-1-A3, 1-1-A4

2019 Rules for Conditions of Classification, Part 1, Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3

Functional Safety

SIL 2, HFT = 0

SIL 3, HFT = 1